

1 MINUTES OF JOINT MEETING  
2  
3 BOUNTIFUL CITY COUNCIL  
4 AND  
5 BOUNTIFUL LIGHT AND POWER COMMISSION  
6

7 April 21, 1987  
8 7:00 P.M.  
9

10 Those in Attendance

11  
12 Power Commission \_\_\_\_\_ Power Department

13  
14 Harold L. Pope, Chairman Clifford Michaelis, Director  
15 Paul Allen Alan Fames  
16 Vaughn Bate Kevin Garlick  
17 Jay Bingham Blaine Haacke  
18 Robert Dewey Vernile Hess  
19 Jerry Lawrence, Allen Johnson  
20 City Council Rep. Kent Servoss  
21 Brent Thomas

22 City Council & Mayor

23  
24 Mayor Dean S. Stahle  
25 Keith Barton  
26 Harold Shafter  
27 Richard G. Sharp  
28 Phyllis C. Southwick

Recording Secretary

Nancy T. Lawrence

Excused

Earl Tingey, Commissioner

29  
30 Visitors

31 Tom Hardy, City Manager  
32 Layne B. Forbes, City Attorney  
33 Jack Jones, HARZA Engineering Co.  
34 Klane Forsgren, Forsgren-Perkins  
35 Larry Denham, Prudential-Bache  
36 Stan Postma, Bingham Engineering  
37 Wil Grey, Press  
38 Gary Blodgett, Press

39  
40 WELCOME

41  
42 Chairman Pope welcomed those in attendance and expressed  
43 appreciation to the dedicated staff of the Power Department.  
44

45 INVOCATION: Commissioner Bate

46  
47 MINUTES

48 Minutes of the regular meeting of the Power Commission held  
49 March 17, 1987 were presented and unanimously approved as written  
50 on a motion made by Commissioner Allen and seconded by Councilman  
51 Lawrence.  
52  
53  
54

**FINANCE REPORT**

1  
2 Mr. Hess reviewed the Finance Report for the Period ending  
3 March 31, 1987, noting that this is one of the few years that  
4 metered sales has lagged behind budget (at 73.1 of 75 percent to  
5 date). He said that even though the income is slow in coming in,  
6 we should finish the year close to the budget projections. The net  
7 profit at the 3/4 year point is \$2,348,199.20. Councilman Lawrence  
8 made the motion that the expenditure report be accepted,  
9 Commissioner Bate seconded the motion, and voting was unanimous.

**FUTURE POWER PROJECTS REVIEW**

10  
11 **East Canyon - HAI= Engineering Company Report and Project**  
12 **Review.** Mr. Michaelis reported that, following a year and a half  
13 of great concern and study regarding development of the East Canyon  
14 hydro project, HARZA Engineering Company has been highly  
15 recommended to provide needed experience and knowledge, and  
16 hopefully some good answers to the questions related to construe-  
17 tion of the East Canyon project. He noted that the major concerns  
18 are (1) safety, (2) liability, and (3) overall economics and  
19 feasibility.  
20

21  
22 Mr. Michaelis then introduced Mr. Jack Jones, an engineer who  
23 has been associated with HARZA Engineering for 30 years, and has  
24 reviewed the East Canyon project. Mr. Jones briefly reviewed the  
25 construction history of the existing East Canyon dam. He then  
26 referred to a method of penetration which was discussed in an  
27 international conference in Switzerland regarding large dams. He  
28 said that if the upstream bulkhead is properly designed, he would  
29 have no qualms with the safety of the penetration project. He said  
30 that the penetration could be done through fracturing, a method  
31 which has been used in the oil industry for many years. A series  
32 of 1 3/4" holes would be drilled on a line 12" on center and a  
33 larger 4" diameter hole (or a cluster of small holes) would be  
34 drilled in the center. A jumbo-sized drill (5 ton with 600  
35 c.f./meter air pressure) would then be used as a splitter to  
36 fracture the concrete towards the center of the ring, thus opening  
37 the dam.  
38

39 The design of the bulkhead could be flat or spherical. The  
40 bigger it is, the more advantages there would be to having a dome;  
41 however, a flat bulkhead would be easier to install.  
42

43 Mr. Jones responded to questions from the Commission and  
44 Council regarding stresses on the dam and comparisons of earthquake  
45 damage between penetration and retrofitting. Mr. Jones indicated  
46 that either process would be equally safe as far as stress factors  
47 to the dam. He said that not many dams have been penetrated;  
48 however, he cited those which have been done successfully.  
49 Regarding the option of retrofitting, Mr. Jones said that it would  
50 be rather awkward to make the connection and the dynamic forces  
51 from the spillway would be a problem. Also, unless there were some

1 re-arranging at the outlet works, there would be a head loss  
2 significant enough to make the project economically unfeasible.  
3

4 The potential liability of the City if the project is pursued  
5 was discussed. It was basic opinion that if there were a dam  
6 failure, regardless of whether the dam was penetrated or  
7 retrofitted, the City would be joined in a lawsuit. Commissioner  
8 Bingham stated that the City could be partially insulated depending  
9 on (1) who designs the project and (2) subject to approval of the  
10 project by the BOR. Mr. Michaelis noted that the BOR has responded  
11 favorably to, and seems to be comfortable with, the option of  
12 penetrating the dam. He said HARZA was one of the firms which was  
13 mentioned by the BOR as having competent experience and knowledge  
14 to do this penetration.  
15

16 The timeframe for the necessary approvals and the actual  
17 construction process were discussed and Mr. Michaelis again stated  
18 the BOR is supportive of the project and has given preliminary  
19 approvals to the penetration concept. Mayor Stahle expressed  
20 appreciation to Mr. Jones for his report and several of the Council  
21 and Commission voiced support of the penetration process.  
22

23 **General Review of Other Prospective Resources.** Mr. Garlick  
24 presented graphs depicting the loads projected for the next 15  
25 years. He reviewed that CRSP has been our main resource, with BPA,  
26 surplus from UAMPS, Hunter 2, our own plant, and now the Echo  
27 hydro, providing a combination of energy and power.  
28

29 Mr. Haacke reviewed the three power sources which are available  
30 to Bountiful and their advantages and disadvantages (hydro, coal,  
31 and oil). He also discussed a chart depicting the load factor for  
32 a typical day in Bountiful.  
33

34 Mr. Garlick reviewed the hydro options which the City currently  
35 has available--**East Canyon, Pineview, Riverdale, Swift Creek, Lost  
36 Creek, and Moon Lake.** He compared their feasibility from an  
37 economic standpoint and noted the purpose they could serve,  
38 dependent on the season they are available and the amount of power  
39 which could be generated by each.  
40

41 Commissioner Bate asked if the projects could be substituted  
42 for the ones currently named in the bond issue, and Mr. Denham  
43 responded that they could not.  
44

45 It was noted that resources other than hydros (Mother Earth  
46 geothermal, specifically) could also be considered in establishing  
47 a future power resource supply.  
48

49 **Weber Hydroelectric Power Project Review.** This matter was not  
50 discussed in the meeting-. However, the\_packet contained a copy of  
51 Bountiful's Notice of Acceptance and Election to Negotiate with  
52 Utah Power and Light which was filed with FERC on March 24, 1987.

1 A copy of the request from Utah Power and Light regarding the  
2 negotiations for the Weber project was also included in the packet.

3  
4 NEW BUSINESS

5  
6 Mr. Michaelis reported that bids for a replacement motor  
7 control center for the plant have been received and he recommended  
8 that the low bid from Riter Engineering, in the amount of  
9 \$13,257.00, be accepted. There will be an additional \$8,000 for  
10 installation costs; however, he noted that \$22,000 was budgeted for  
11 this project. Commissioner Bate made the motion that the bid from  
12 Riter be approved as recommended. Councilman Lawrence seconded the  
13 motion and voting was unanimous.

14  
15 ADJOURNMENT

16  
17 The meeting adjourned at 9:30 p.m. to executive session.

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20 '9E3: &a,vt 4<sup>1</sup>.4-&11.1L,6,  
21  
22 MAYOR

23  
24 /s/ Harold L. Pope  
25 Power Commission Chairman

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29 CITY RECORDER  
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